

BookletChart™

Little Girls Point to Silver Bay

NOAA Chart 14966

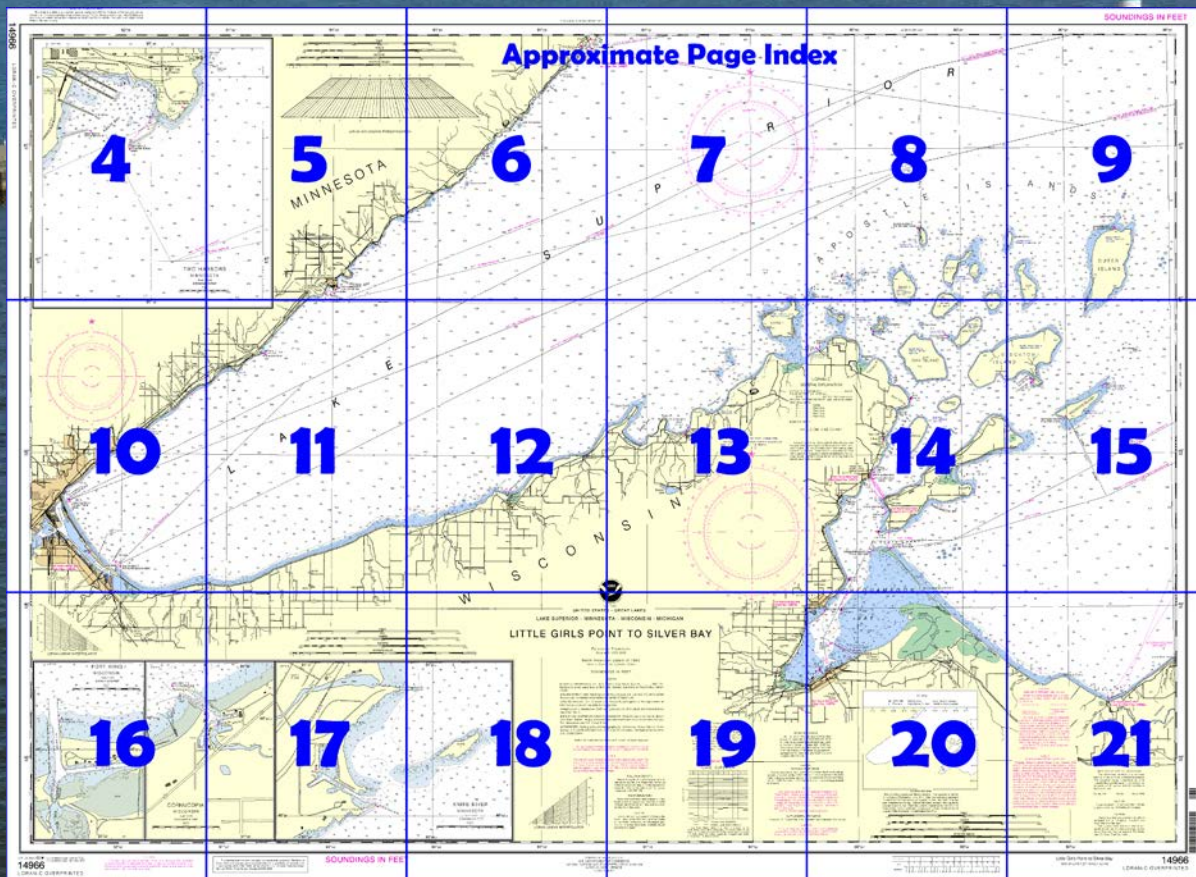


A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™ ?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14966>



(Selected Excerpts from Coast Pilot).

Sand Point, about 5 miles WSW of Point Detour, and **Squaw Point**, 2 miles NNE of Cornucopia, are prominent.

Madeline Island, the southernmost and largest of the Apostle Islands, is 12 miles long NE and SW and 1 to 3.2 miles wide. A shoal with depths less than 6 feet extends 0.5 mile SW from the SW point of the island. The outer end of the shoal is marked by a lighted buoy. Shoals extend 0.1 to 0.5 mile off the S shore of the island.

Big Bay, the large bight midlength of the S shore, has deep water within 0.1 mile of its head. Shoals extend off 0.9 mile around the E point of the

island. The NW shore of the island is bold and has deep water within 0.25 mile. At **Point De Froid**, the NW point of the island, a shoal extends 0.4 mile W. The W shore of the island has deep water within 0.35 mile.

La Pointe Harbor serves the village of **La Pointe, Wis.**, a small old settlement and summer resort just S of Point De Froid at the W end of Madeline Island. A ferry operates between La Pointe and Bayfield.

Cornucopia, Wis., is a small-craft harbor at the mouth of **Siskiwit River** on the SE side **Siskiwit Bay**, about 13.5 miles SW of Point Detour. The harbor is a base for commercial fish tugs and a refuge for recreational craft.

From Cornucopia SW for about 14 miles to Port Wing, the shore is relatively bold and can be approached within 0.5 mile, except at Bark Point where shoals extend 0.8 mile NE. **Bark Point** (46°53.1'N., 91°11.1'W.) encloses the W side of **Bark Bay**. The bay has fair holding ground with protection from all but NE winds. **Roman Point** encloses the E side of Bark Bay and separates it from Siskiwit Bay.

Herbster, Wis., is a small settlement at the mouth of **Cranberry River**, 5.2 miles SW of Bark Point. In 1983, the wharf at the village was in ruins.

Port Wing, Wis., is a village and small-craft harbor at the mouth of **Flag River**, about 28 miles SW of Point Detour and 34 miles E of Duluth. The harbor is used by commercial fish tugs and recreational craft.

Allouez Bay is a very shallow bay that extends SE from Superior Bay S of Superior Entry and is enclosed on the E by **Wisconsin Point**.

St. Louis River flows into the W side of Superior Bay near its N end through a narrow gap between **Rices Point** on the N and **Connors Point** on the S. **St. Louis Bay** is a widening in the river that extends from these points to **Grassy Point**, 3 miles SW. **Howards Bay** is a narrow inlet that leads SE from St. Louis Bay for 1 mile on the W side of Connors Point.

Superior Harbor is entered from deep water in Lake Superior between converging breakwaters and parallel piers to the S end of Superior Bay. The outer ends of the breakwaters and piers are marked by lights.

Federal project depths are 31 to 27 feet in Superior Entry, thence 27 feet in Superior Harbor Basin and anchorage area, Allouez Bay Channel, and Superior Front Channel. (See Notice to Mariners and latest editions of charts for controlling depths.)

Duluth Harbor is entered from deep water in the lake between parallel piers to the N end of Superior Bay.

Caution.—Much of the Ashland waterfront is in ruins. Piles and submerged piles extend up to 2,300 feet from shore throughout the area. The remains of piles are often adrift in the harbor.

In 1987, submerged debris was reported immediately N of the Ashland Breakwater, extending at least 4,900 feet off the breakwater, with heaviest concentration at a point about 2,790 feet, 061° from Ashland Breakwater Light.

Bayfield, **Caution.**—Submerged dock ruins, covered 2 feet and marked at the outer end by a buoy, extend 550 feet from shore 0.9 mile SW of Bayfield Harbor South Breakwater Light.

Caution.—A sunken wreck is 0.9 mile ENE of the entrance to Duluth Ship Canal.

The area immediately ESE of Duluth Harbor Basin Traffic Lighted Buoy is subject to shoaling.

Local magnetic disturbance.—Differences from normal variation of 001°E to 005°E have been observed in the lake about 10 miles from Duluth.

Harbor regulations.—A speed limit of 8 mph (7 knots) is enforced in Duluth-Superior Harbor. (See **33 CFR 162.110**, chapter 2, for harbor regulations.)

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Cleveland

Commander

9th CG District

Cleveland, OH

(216) 902-6117

Table of Selected Chart Notes

Pump-out facilities

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution. Station positions are shown thus:

○ (Accurate location) ◐ (Approximate location)

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.467" southward and 0.820" westward to agree with this chart.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners. During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Duluth, MN KIG-64 162.55 MHz

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

----- Pipeline Area ~~~~~ Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

APOSTLE ISLANDS NATIONAL LAKESHORE

The Apostle Islands National Lakeshore boundary extends from the shoreline to $\frac{1}{2}$ mile offshore.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan. Refer to charted regulation section numbers.

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY 100kHz
PULSE REPETITION INTERVAL
8970 89,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M Master
W Secondary
X Secondary
Y Secondary
Z Secondary

EXAMPLE: 8970-Y

RATES ON THIS CHART

8970-X 8970-Y

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the $\frac{1}{4}$ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waterways connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

SOURCE DIAGRAM

Most of the hydrography identified by the letter "J" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Other outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

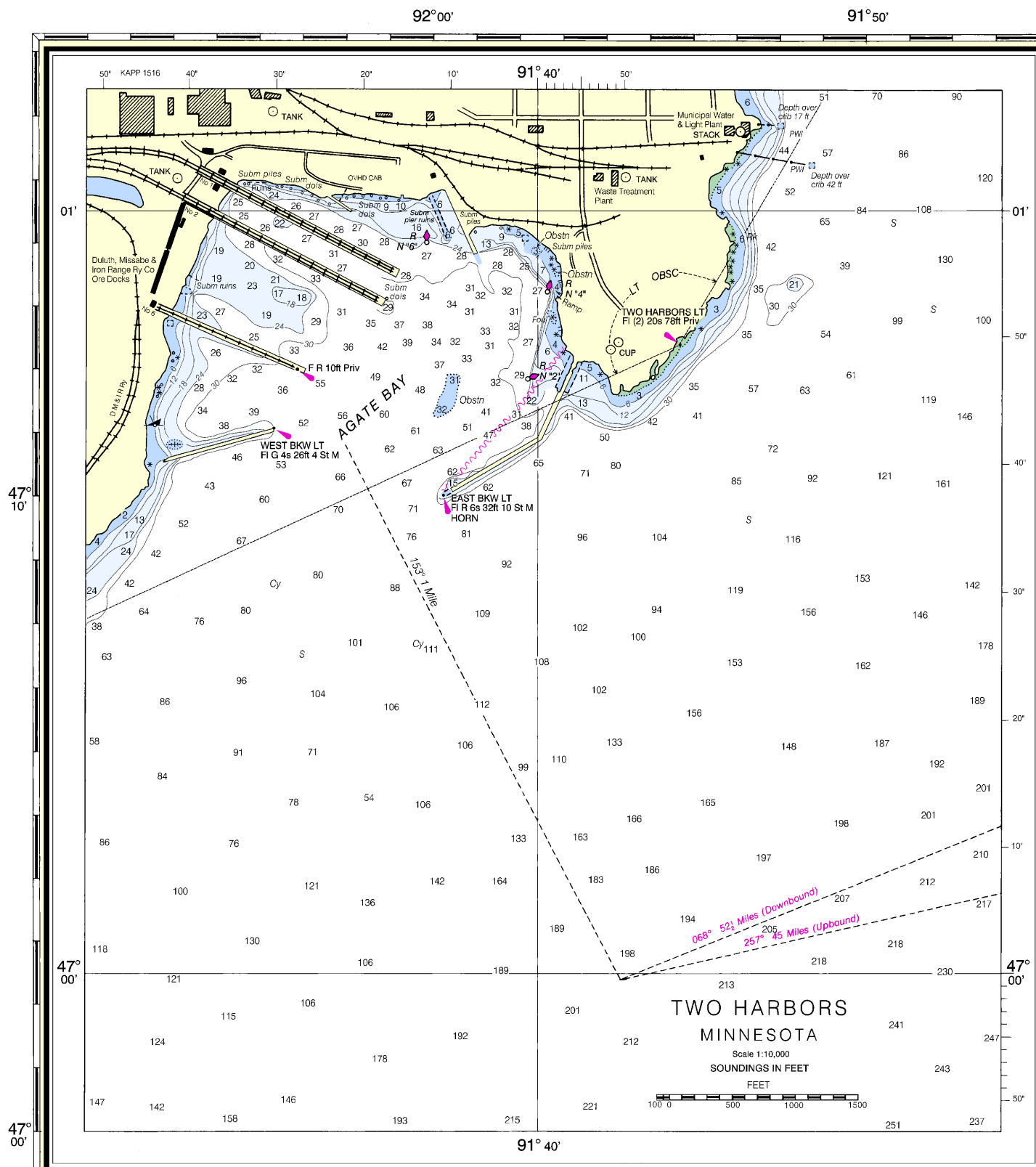
AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey and U.S. Coast Guard.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 601.1 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

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LORAN-C OVERPRINTED



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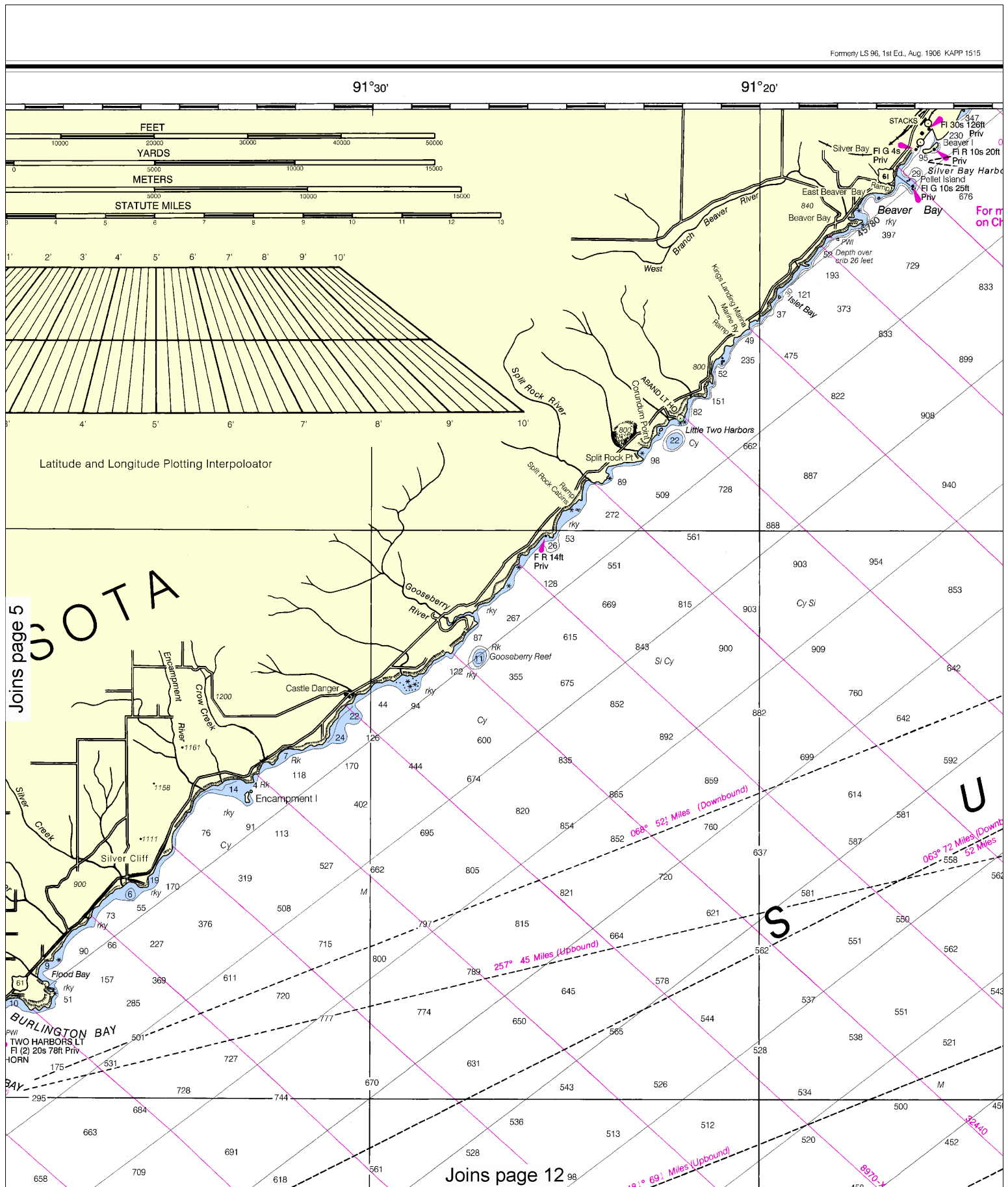
4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

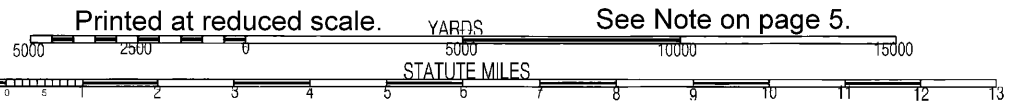
See Note on page 5.



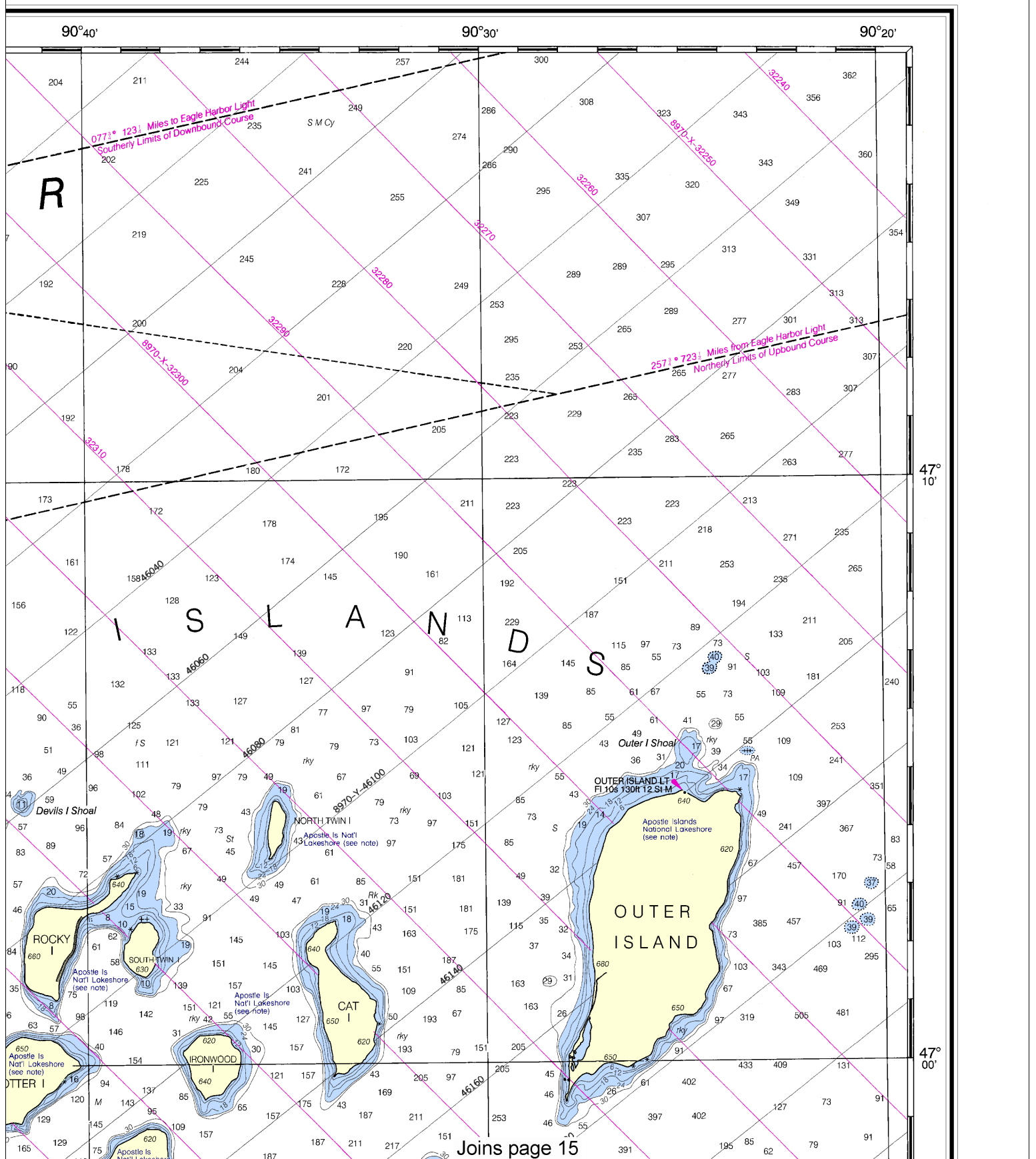


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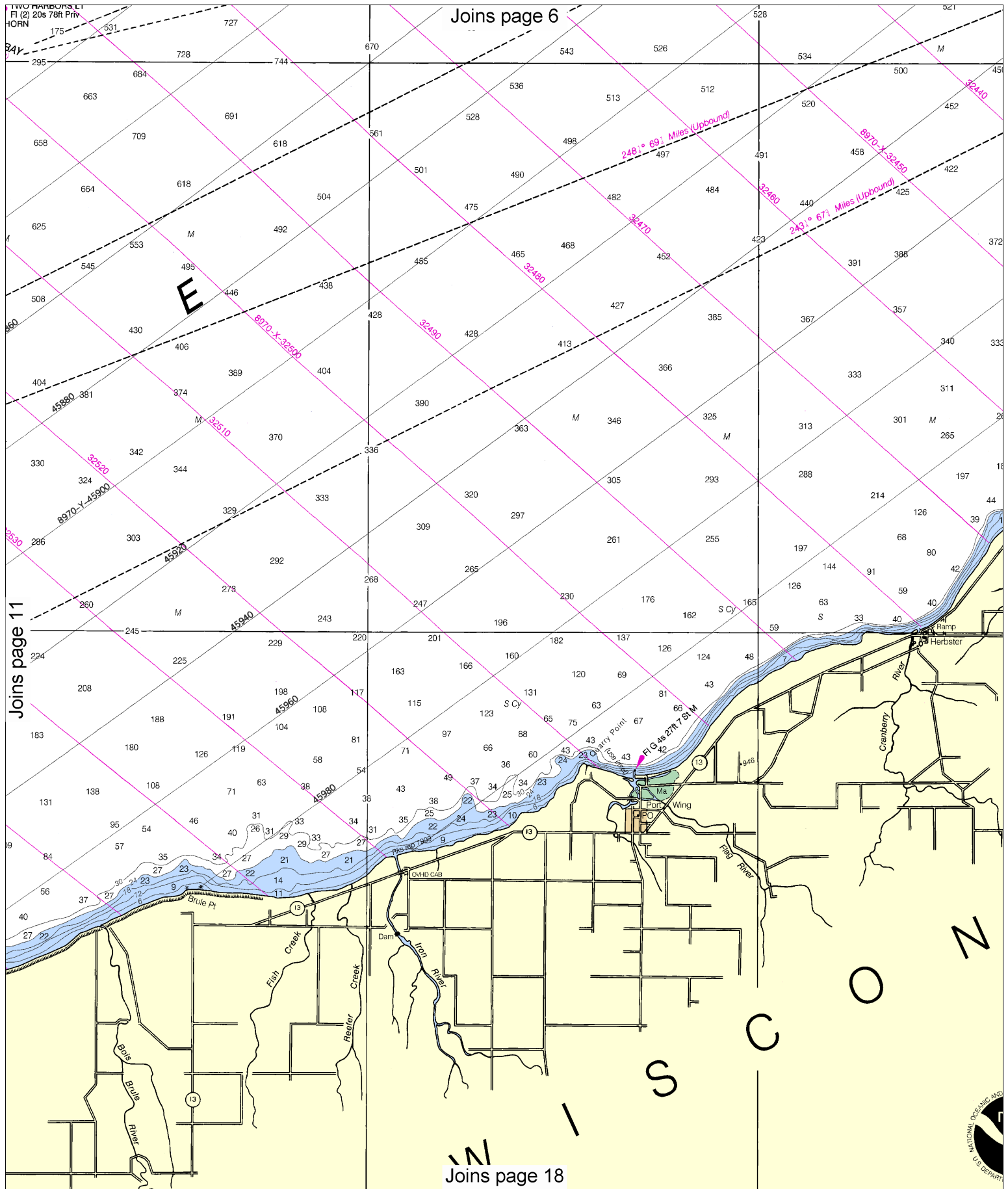
Note: Chart grid lines are aligned with true north.

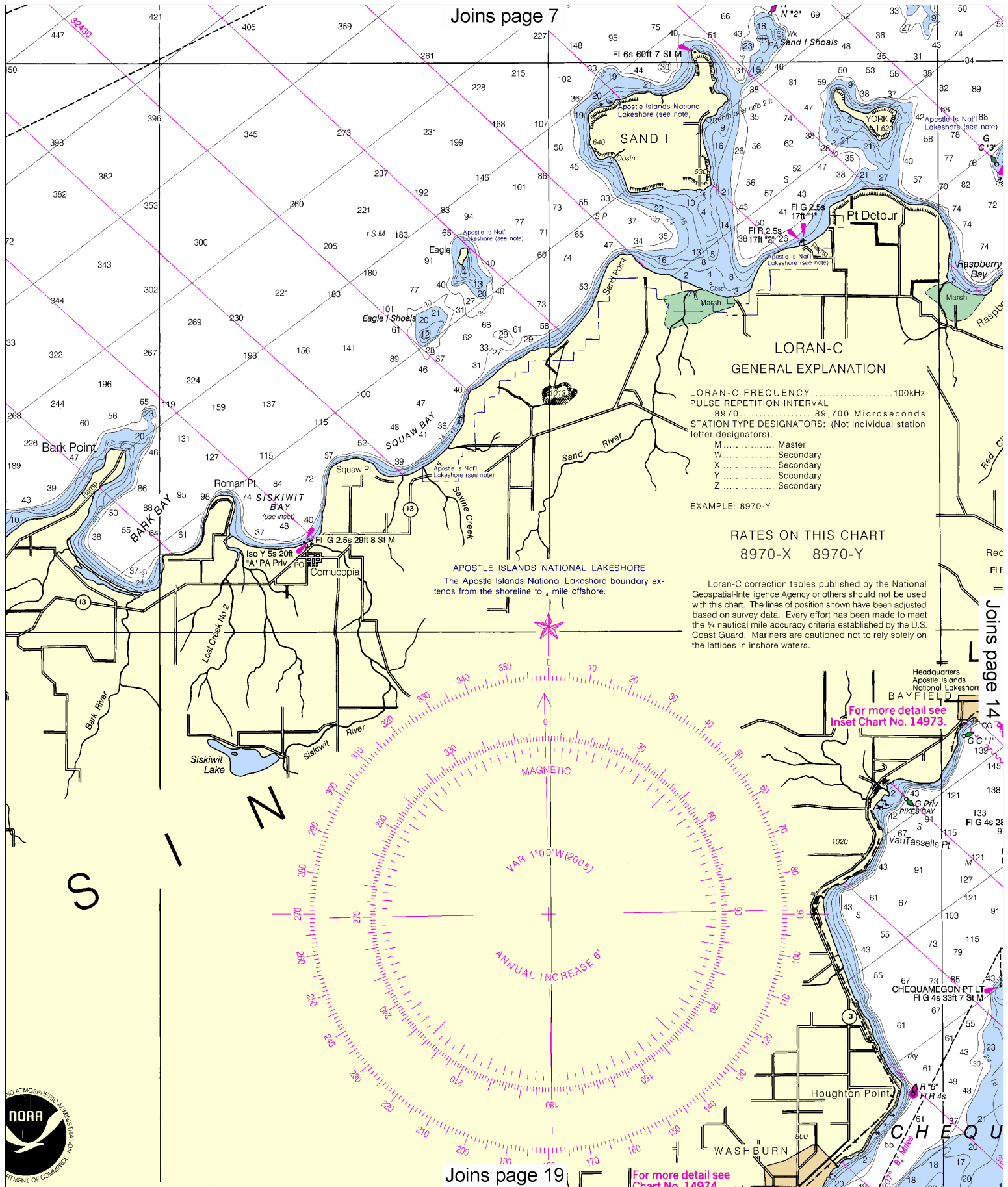


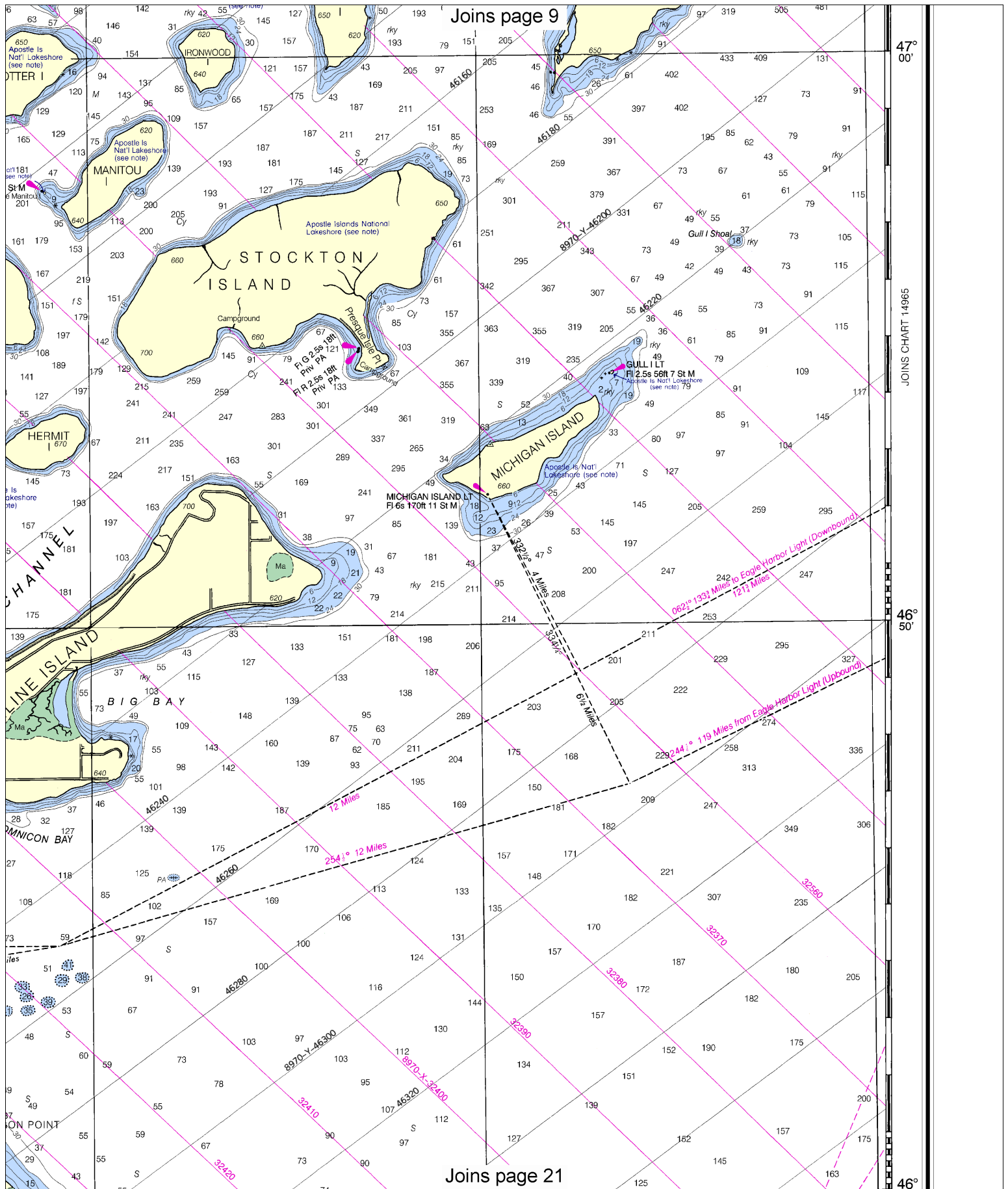
SOUNDINGS IN FEET

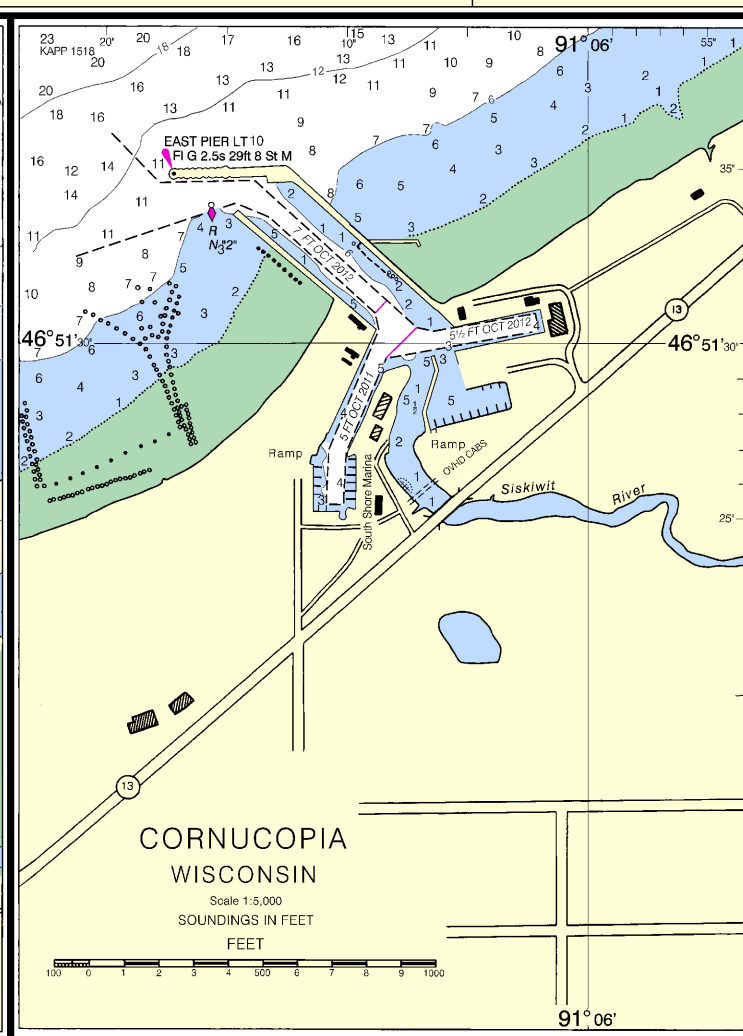
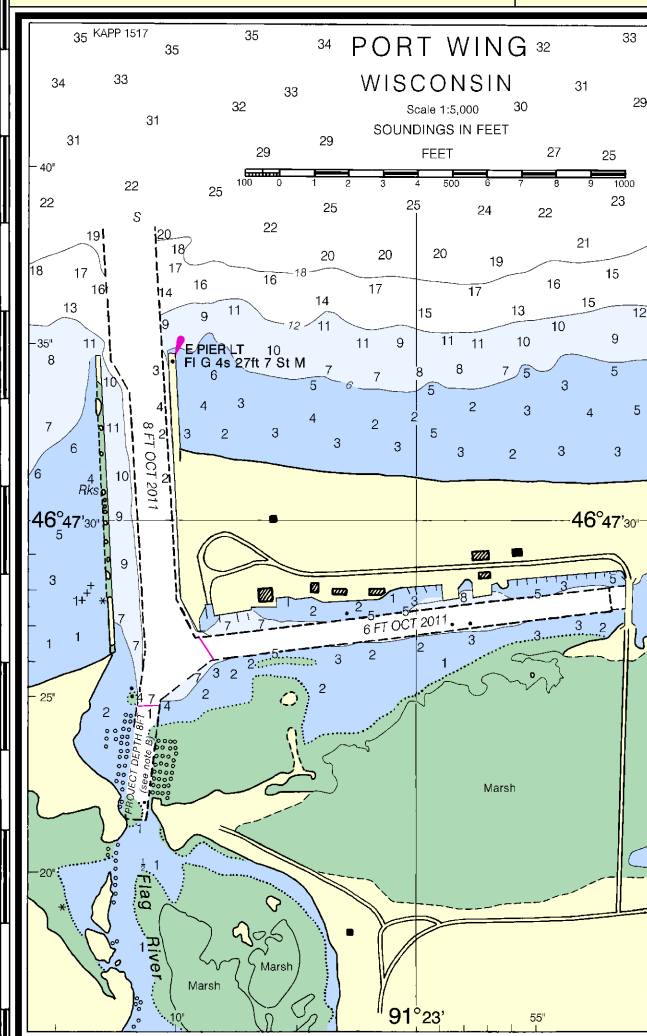
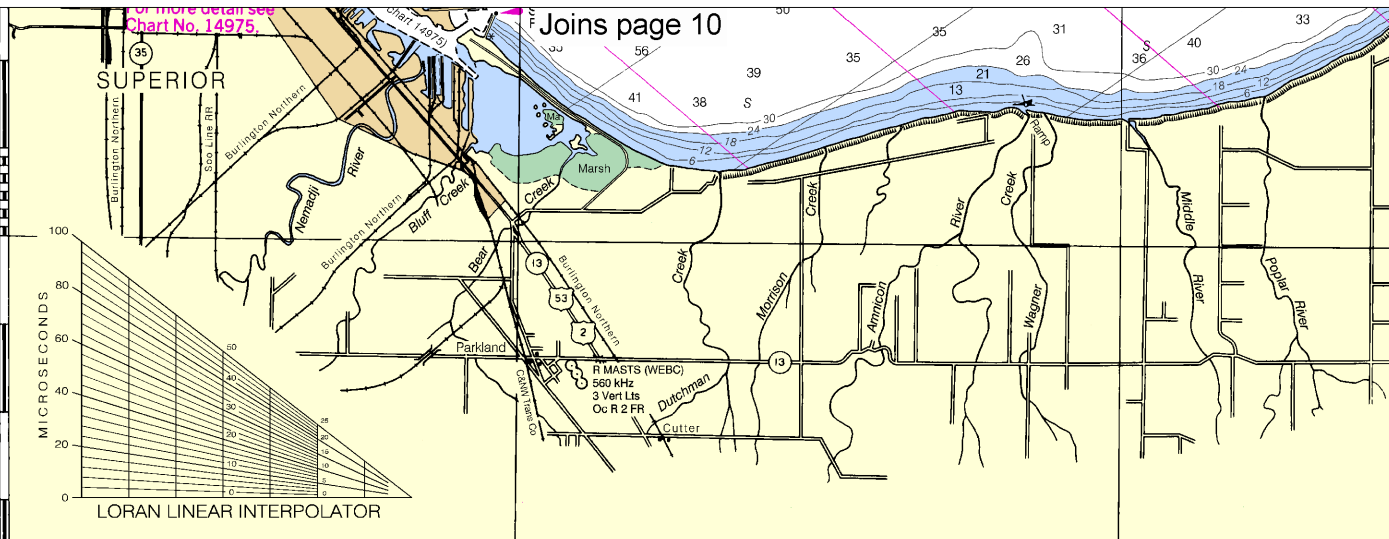












27th Ed., May / 05 ■ Corrected through NM May 7/05
Corrected through LNM May 3/05

14966

LORAN-C OVERPRINTED

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safety of life and property. The U.S. Coast Guard encourages users to submit corrections, improving this chart to the Chief, Marine Chart Division, Service, NOAA, Silver Spring, Maryland 20910-3282.

16

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

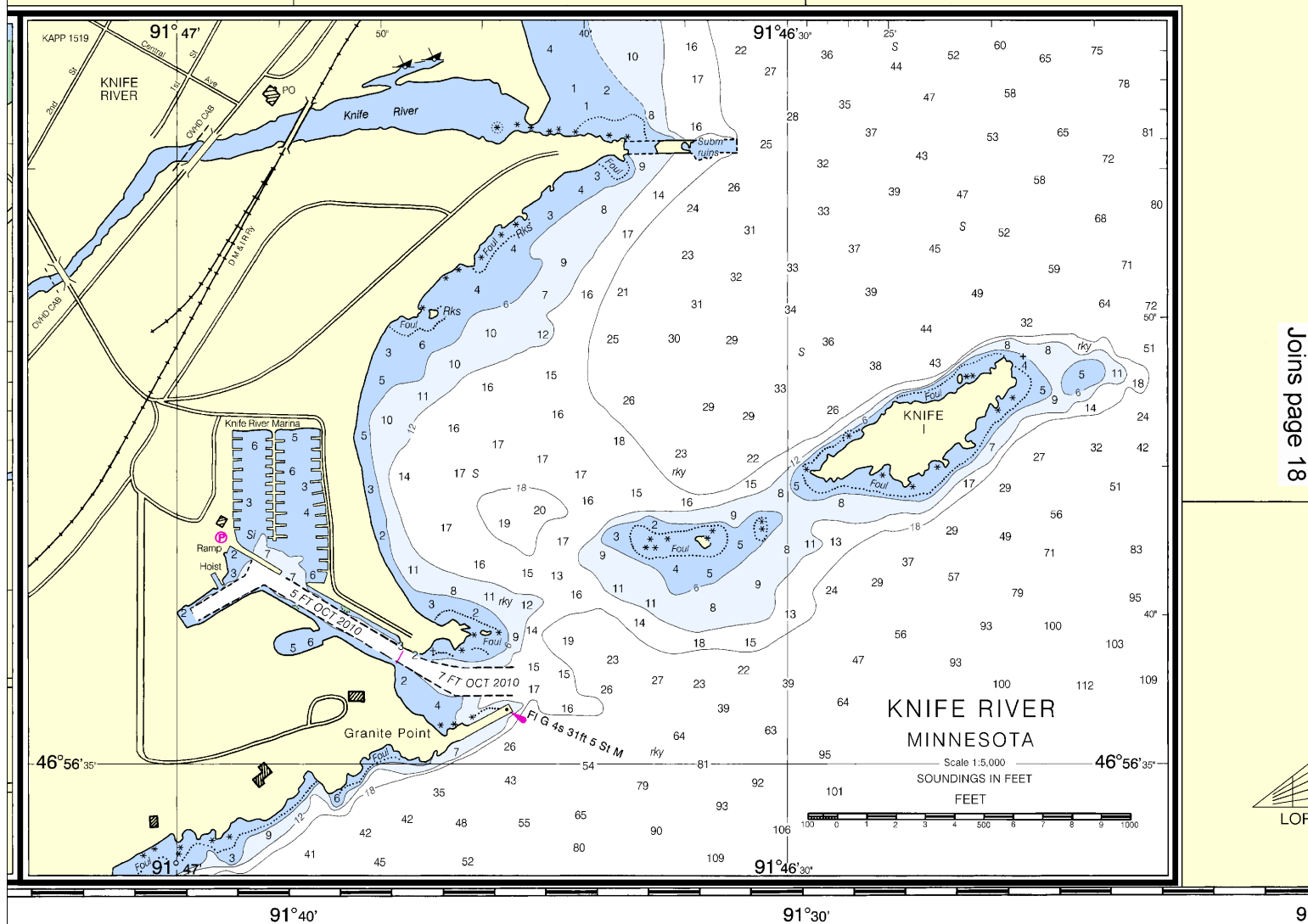
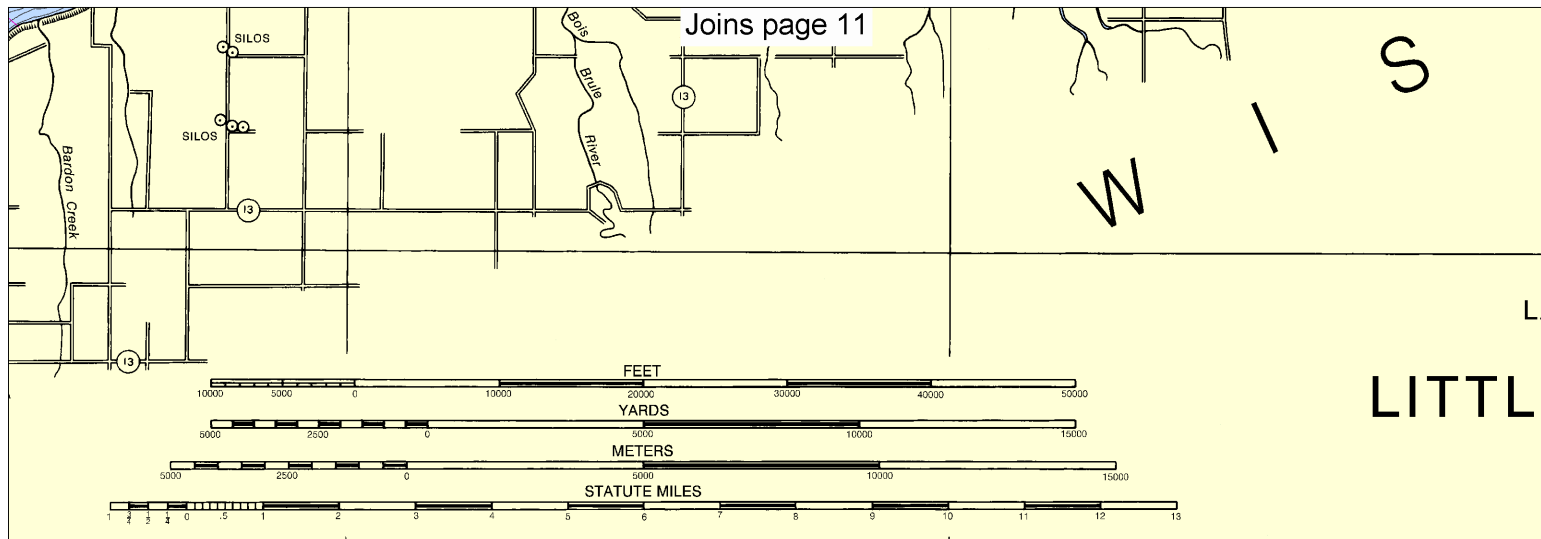
YARDS

5000 2500 0 5000 10000 15000

STATUTE MILES

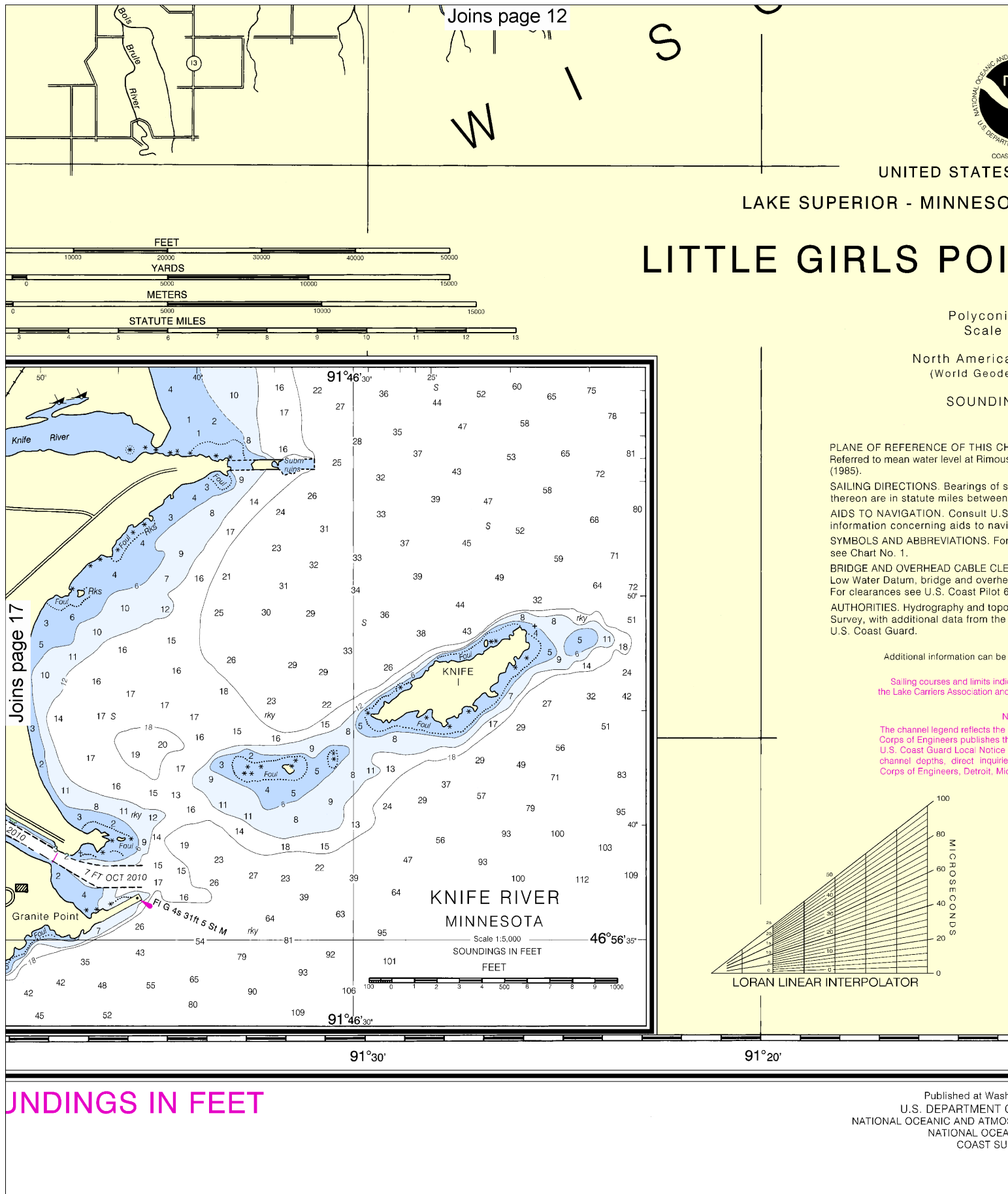
0 1 2 3 4 5 6 7 8 9 10 11 12 13

See Note on page 5.



For safe navigation. The National Ocean Service provides this information as a public service. For more information, visit www.noaa.gov.

SOUNDINGS IN FEET



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S

W

I

UNITED STATES

LAKE SUPERIOR - MINNESOTA

LITTLE GIRLS POINT

Polyconic
Scale

North America
(World Geodetic)

SOUNDING

PLANE OF REFERENCE OF THIS CHART
Referred to mean water level at Rimouski
(1985).

SAILING DIRECTIONS. Bearings of lights
thereon are in statute miles between
AIDS TO NAVIGATION. Consult U.S. Coast
information concerning aids to navigation.
SYMBOLS AND ABBREVIATIONS. For
see Chart No. 1.

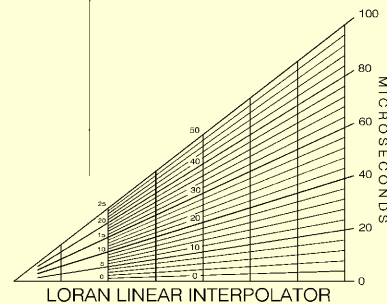
BRIDGE AND OVERHEAD CABLE CLEARANCES
Low Water Datum, bridge and overhead
For clearances see U.S. Coast Pilot 6.

AUTHORITIES. Hydrographic and topographic
Survey, with additional data from the
U.S. Coast Guard.

Additional information can be

Sailing courses and limits indicated
the Lake Carriers Association and

The channel legend reflects the
Corps of Engineers publishes the
U.S. Coast Guard Local Notice
channel depths, direct inquiries
Corps of Engineers, Detroit, Michigan.



SOUNDINGS IN FEET

Published at Washington
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC
NATIONAL OCEANIC AND ATMOSPHERIC
COAST GUARD

18

Note: Chart grid
lines are aligned
with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES



IS - GREAT LAKES

OTA - WISCONSIN - MICHIGAN

INT TO SILVER BAY

ic Projection
1:120,000

can Datum of 1983
etic System 1984)

INGS IN FEET

NOTES

CHART (Low Water Datum).....601.1 ft.
uski, Quebec, International Great Lakes Datum

sailing courses are true and distances given
n points of departure.

S. Coast Guard Light List for supplemental
vigation.

or complete list of symbols and abbreviations

LEARANCES. When the water surface is above
lead clearances are reduced correspondingly.
6.

ography by the National Ocean Service, Coast
e Corps of Engineers, Geological Survey and

be obtained at nauticalcharts.noaa.gov.

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NOTE B

e Corps of Engineers project depth. The
the controlling depth periodically in the
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POLLUTION REPORTS

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stances to the National Response Center via
1-800-424-8802 (toll free), or to the nearest U.S.
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RADAR REFLECTORS

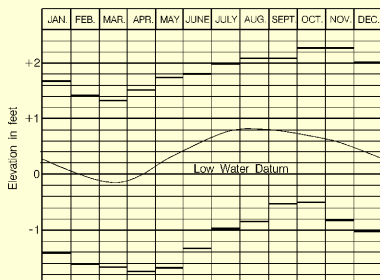
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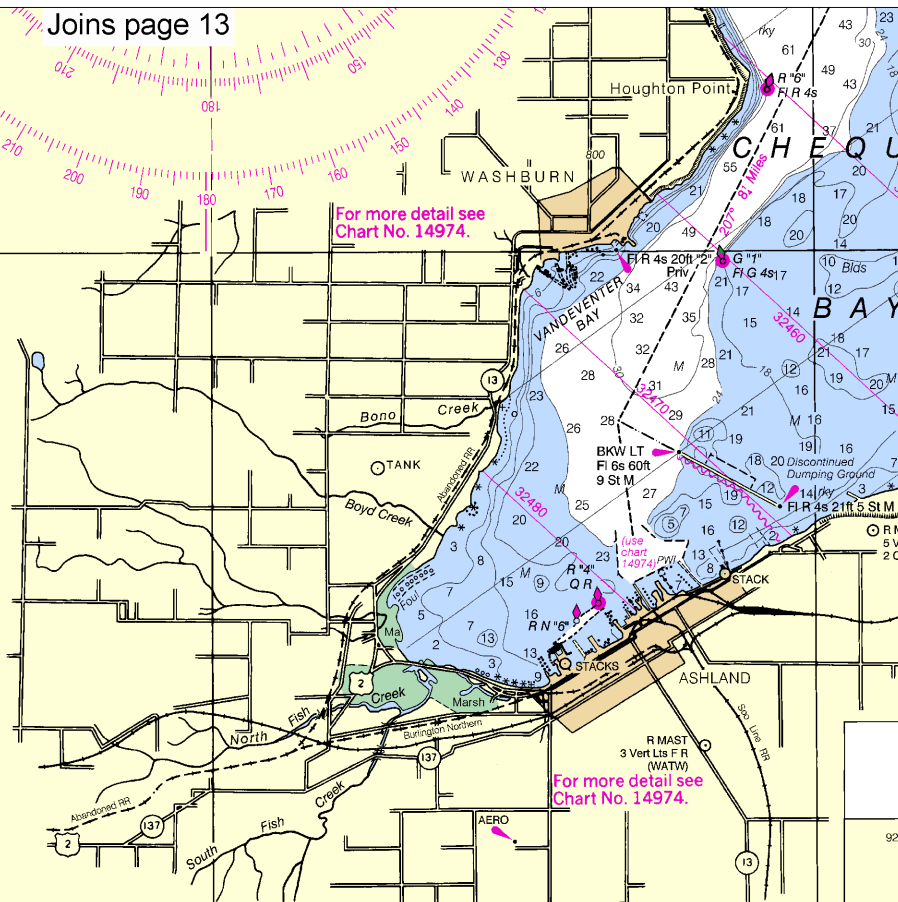
Pump-out facilities

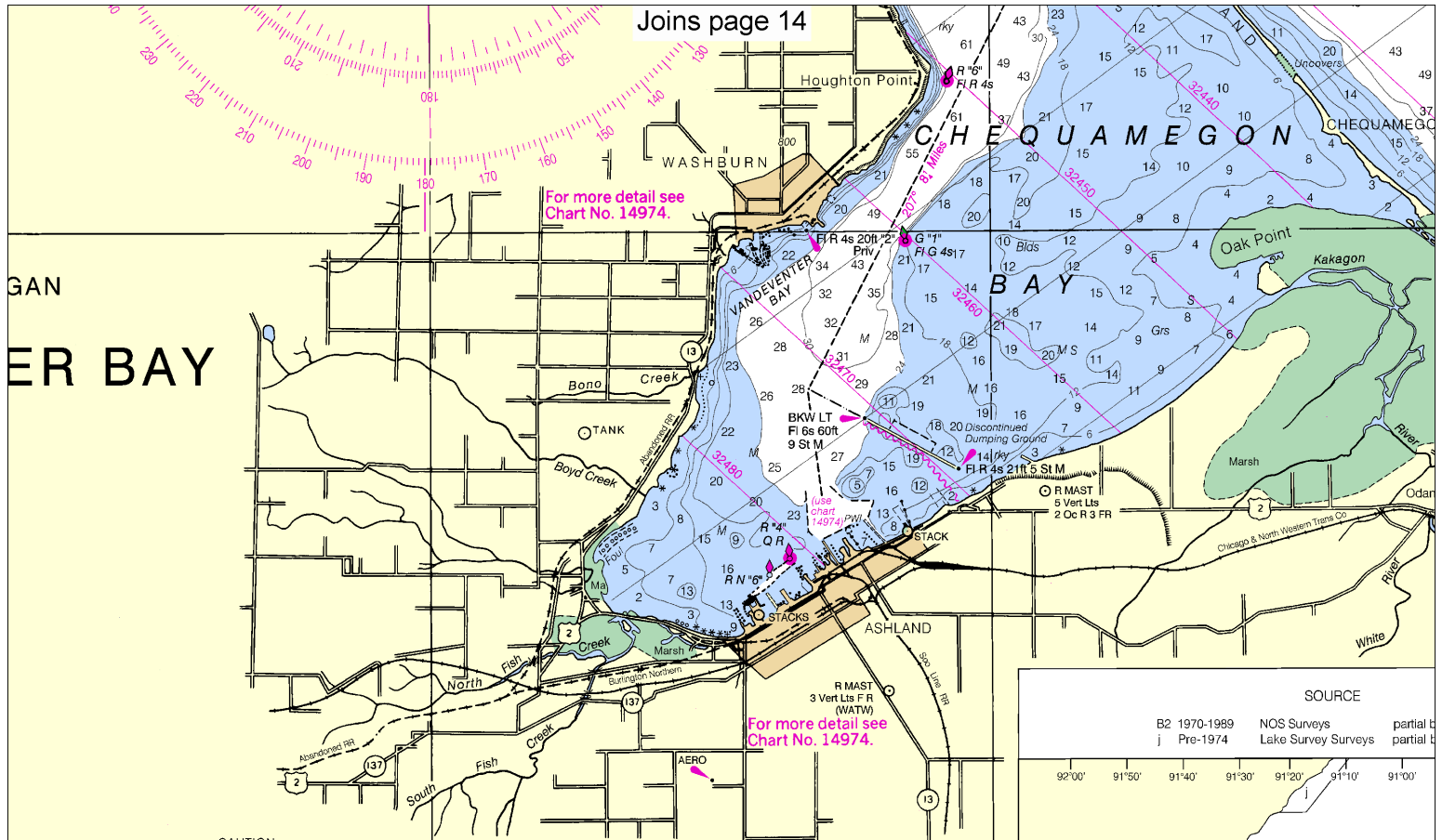
LAKE SUPERIOR



Low Water Datum, which is the plane of reference for the
levels shown on the above hydrograph, is also the plane of refer-
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or lesser than the charted depths.

Joins page 13





CAUTION

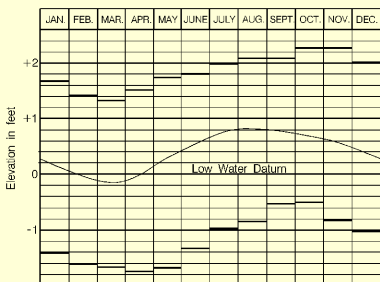
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 (●) (Accurate location) (○) (Approximate location)

HORIZONTAL DATUM

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● Pump-out facilities

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CAUTION

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SUPPLEMENTAL INFORMATION

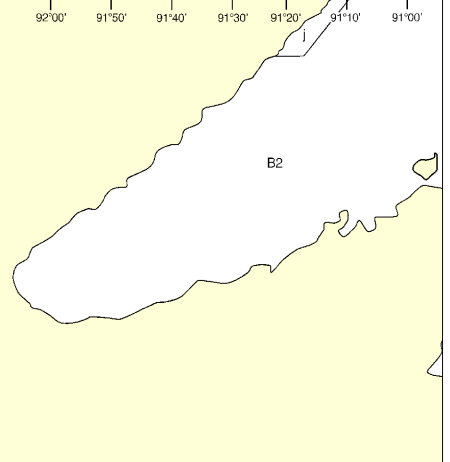
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WARNING

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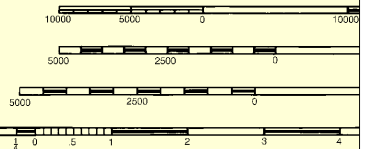
SOURCE

B2 1970-1989 j Pre-1974 NOS Surveys Lake Survey Surveys partial b partial b



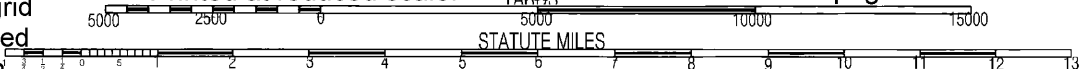
SOURCE DIAGRAM

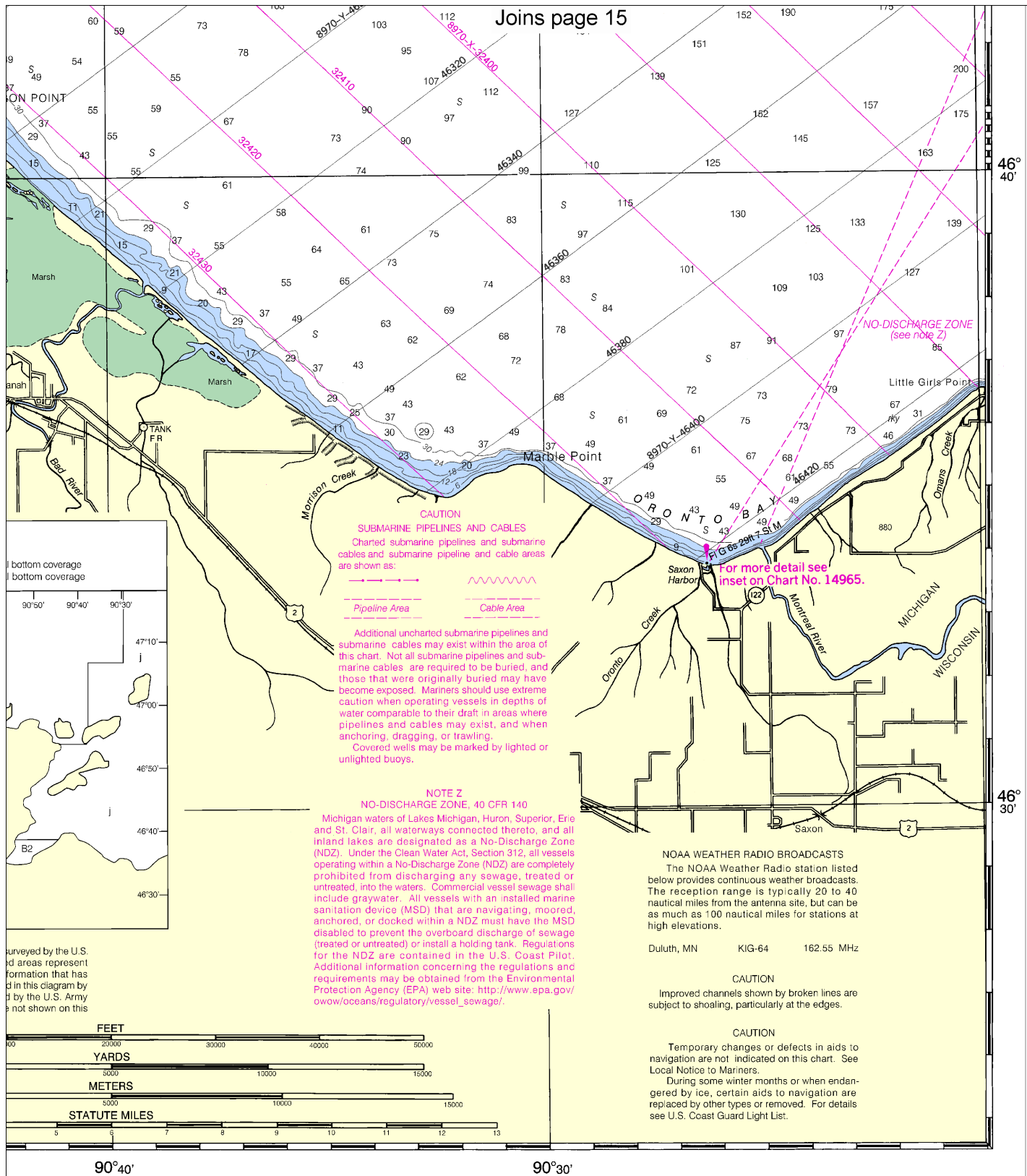
Most of the hydrography identified by the letter "j" was surveyed by the Army Corps of Engineers prior to 1974. Other outlined the limits of the most recent hydrographic survey information evaluated for charting. Surveys have been banded by date and type of survey. Channels currently maintained by the Corps of Engineers are periodically resurveyed, and are indicated by the letter "b". Refer to Chapter 1, United States Coast Pilot.



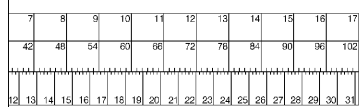
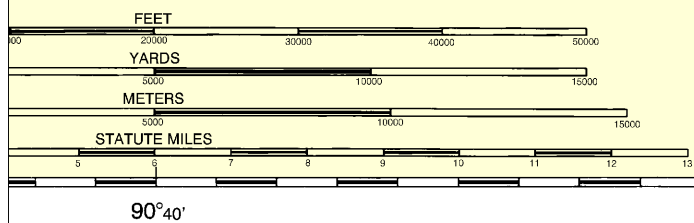
91°00'

90°50'





Surveyed by the U.S. and areas represent information that has been used in this diagram by the U.S. Army. Not shown on this



Little Girls Point to Silver Bay
SOUNDINGS IN FEET - SCALE 1:120,000

14966
LORAN-C OVERPRINTED

ED. NO. 27
NSN 7642014010602
NGA REFERENCE NO. 14XC014966



EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

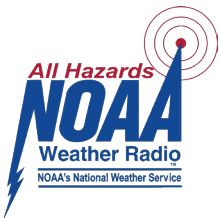
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

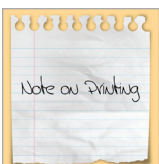
<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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